AMENDMENTS TO THE CLAIMS:

Please amend the Claims as follows:

1. (Original) A viscosity index improver, which comprises a oil soluble copolymer (A) having a weight-average molecular weight of 3,000 - 500,000 and comprising units of 5-90% by weight of a monomer (a) represented by the general formula:

$$CH_2=C(R^1)\text{-}COO\text{-}(A\text{-}O)_n\text{-}R \qquad (1)$$

wherein R^1 is H or CH_3, A is an alkylene group containing 2-4 carbon atoms, n is 0 or an integer of 1-20, and R is a branched alkyl group containing 18-36 carbon atoms, free from any polymethylene group containing more than 16 carbon atoms; units of 5-90% by weight of at least one monomer (b) selected from the group consisting of (b1) alkyl acrylates and methacrylates containing 8-17 carbon atoms in the alkyl group and (b2) straight-chain alkyl acrylates and methacrylates containing 18-24 carbon atoms in the alkyl group; and units of 5-50% by weight of (c) an unsaturated monomer having at least one group selected from hydroxyl, amide and carboxyl groups.

2. (Original) The improver of Claim 1, wherein the branched alkyl group R is represented by the general formula:

$$\begin{array}{l} R'' \\ | \\ -(CH_2)_pCH\text{-}R' \end{array} \qquad (2)$$

Application Number: 10/632,108
Attorney Docket Number: 103176-00003

wherein p is 0 or an integer of 1-15, and R′ and R″ are independently selected from the group consisting of straight-chain alkyl groups containing 1-16 carbon atoms and branched alkyl groups containing 3-34 carbon atoms.

3. (Original) The improver of Claim 2, wherein R′ and R″ are the same or different straight-chain alkyl groups containing 6-18 carbon atoms.

4. (Original) The improver of Claim 2, wherein p in the general formula (2) is 0 or 1.

5. (Original) The improver of Claim 1, wherein the branched alkyl group R contains 18-30 carbon atoms.

6. (Original) The improver of Claim 1, wherein n in the general formula (1) is 0.

7. (Original) The improver of Claim 1, wherein said copolymer (A) further contains units of up to 15% by weight of at least one monomer selected from the group consisting of (d) other alkyl acrylates and methacrylates, (e) unsaturated hydrocarbons containing 2-20 carbon atoms, (f) vinyl ketones, (g) epoxy-containing unsaturated monomers, (h) halogen-containing unsaturated

monomers, (i) alkyl alkenyl ethers, (j) alkenyl carboxylates and (k) other nitrogen-containing unsaturated monomers.

8. (Original) The improver of Claim 1, wherein said monomer (a) is at least one selected from the group consisting of 2-octyl-dodecyl methacrylate, 2-decyltetradecyl methacrylate, 2-octyldodecyl acrylate and 2-decyltetradecyl acrylate.

9. (Original) The improver of Claim 1, wherein said monomer (c) is at least one selected from the group consisting of hydroxyl-containing monomers (c1), amide-containing monomers (c2) and carboxyl-containing monomers (c3).

10. (Original) The improver of Claim 9, wherein said monomer (c1) is at least one monomer selected from the group consisting of (c11) hydroxyl-containing acrylic monomers, (c12) alkenols containing 2-12 carbon atoms, (c13) alkenediols containing 4-12 carbon atoms, (c14) hydroxyl-containing alkenyl ethers containing 3-12 carbon atoms in the alkenyl group, (c15) hydroxyl-containing aromatic unsaturated monomers, and (c16) oxyalkylene ethers of (c11)-(c15).

11. (Original) The improver of Claim 10, wherein said monomer (c11) is at least one monomer selected from the group consisting of (c111) acrylates and methacrylates represented by the general formula:

$$CH_2=C(R^1)\text{-}COO\text{-}(A\text{-}O)_m\text{-}H \qquad (3)$$

wherein R^1 is H or CH_3, A is an alkylene group containing 2-4 carbon atoms, and m is an integer of 1-20, and (c112) acrylates and methacrylates of a polyhydric alcohol having 3-8 hydroxyl groups.

12. (Original) The improver of Claim 11, wherein m in the general formula (3) is 1.

13. (Original) The improver of Claim 9, wherein said monomer (c2) is at least one monomer selected from the group consisting of (c21) acrylamides and methacrylamides represented by the general formula:

$$\begin{array}{l} R^2 \\ | \qquad\qquad (4) \\ CH_2=C(R^1)\text{-}CO\text{-}N\text{-}R^3 \end{array}$$

wherein R^1 is H or CH_3, R^2 and R^3 are independently selected from the group consisting of hydrogen atom, alkyl groups containing 1-4 carbon atoms and hydroxyalkyl groups containing 1-4 carbon atoms, and (c22) N-vinylcarbonamides.

14. (Original) The improver of Claim 9, wherein said monomer (c3) is at least one monomer selected from the group consisting of (c31) unsaturated monocarboxylic acids, (c32) unsaturated dicarboxylic acids and (c33) mono-alkyl ester of (c32) containing 1-8 carbon atoms in the alkyl group.

15. (Original) The improver of Claim 1, wherein said polymer (A) comprises 20-70% by weight of units of (a), 20-70% by weight of units of (b) and 10-30% by weight of units of (c).

16. (Original) The improver of Claim 15, wherein said copolymer (A) further contains units of up to 10% by weight of an alkyl acrylate or methacrylate (d1) containing 1-4 carbon atoms in the alkyl group.

17. (Original) A viscosity index improver concentrate, which comprises 20-90% by weight of an improver according to Claim 1 and 10-80% by weight of a diluent.

18. (Original) A lube oil composition, which comprises a major amount of a base oil and 0.01-45% by weight of an improver according to Claim 1.

19. (Original) The composition of Claim 18, wherein the base oil has a kinematic viscosity of 1 - 18 mm^2/s at 100°C and a viscosity index of at least 60.

20. (Original) The composition of Claim 18, wherein the base oil has a viscosity index of at least 110.

21. (Currently Amended) The composition of Claim 18, ~~whereins~~ wherein the lube oil is selected from the group consisting of gear oils, transmission fluids, traction oils, hydraulic oils and engine oils.

22. (New) The improver of Claim 1, wherein the copolymer (A) has a solubility parameter of from 9.4, exclusive, to 9.8, inclusive.

23. (New) The improver of Claim 1, wherein the copolymer (A) has a solubility parameter of 9.6.